Bentley International User Conference (BIUC)
Corps Meeting Notes
Baltimore, Maryland
21 May 2003

1. Participants:

Headquarters, USACE
Jean McGinn, HQ CADD Proponent

Great Lakes & Ohio River Division
Joe Chesire, Chicago
Ed Mathison, Louisville
John Pittman, Huntington
Jim Vassar, Huntington
Butch Rogers, Huntington
Mark Keathley, Huntington

Mississippi Valley Division
Aaron Dunlop, St. Paul
Greg Porycky, St. Paul
Lori Taylor, St. Paul
Carl Broyles, New Orleans

North Atlantic Division
Paul Rebarchik, Europe

Northwestern Division
Stan Shirk, Omaha
James Sherman, Portland
Debbie Solis, Seattle
Lynn Parsons, Walla Walla

Pacific Ocean Division
Santiago Mor, Honolulu
O-Song Kwon, Far East

South Atlantic Division
Tony Lijewski, Charleston
Roger Porzig, Jacksonville
Michael Boe, Jacksonville
Pete Kendrick, Jacksonville

South Pacific Division
Mary Diel, Sacremento
Jim Weir, Sacremento

Southwestern Division
Mike Guldemond, Fort Worth
Glenn White, Forth Worth
Eric Irwin, Fort Worth
Terri Nolen, Ft. Worth
Ed Murphy, Ft. Worth
Saji Puthenpurayel, Ft. Worth
Cyndi Riley, Little Rock

Transatlantic Center
Glenn Kato

Vendors
Jim Stirk, Instep
Scott McDaniel, Instep
Doug Moat, Bentley

2. Bentley: Bentley and the Corps are trying to deploy the portfolio package on a division-wide basis. They are in the discussion phase with MVD and also talking to SAD. There has also been discussion of a Corps-wide purchase. The portfolio package can be purchased at a desktop level or server level. The desktop level includes all of Bentley desktop products (Triforma, Inroads, Iplot, etc.). The server level includes products in the desktop level plus server products (ProjectWise, etc.). Basically, when purchasing a specific portfolio package, you receive a license for each product contained in the package for every license of MicroStation purchased. In general, this cost is usually less

expensive than purchasing individual software licenses and you get more software for the dollar. Products to be included in the next packages are under review. GeoPak products were not included in the current package because the company was not owned by Bentley at the time. Bentley is timing the new portfolio packages to coincide with the new FY.

Only 13 districts were not represented at this years BIUC. They are Anchorage, Kansas City, Los Angeles, Tulsa, Galveston, Nashville, Mobile, Wilmington, Detroit, Buffalo, Japan, Philadelphia, and Pittsburgh Districts.

Bentley has agreed to help the Corps with a number of WebX sessions. Bentley looking for topics for WebX presentations. Not for a training class; just for a demonstration.   NYDOT used it to give a presentation on how they converted to the to a standard. It was a very good presentation and should be available on their website.

3. Instep (Jim Stirk): Instep currently has a Blanket Purchase Agreement with the CADD Center. They are working on the following projects:

a. CADD Workspace: They are currently upgrading the CADD Center's CADD Workspace to interface with ProjectWise. John Kincaid (MVR) is currently reviewing draft. This release will be certified to run with MicroStation 8.1.

b. Details Library: The CADD Details Library interface is being upgraded to work with MicroStation V8. Details on the website will be displayed in SVG format which are then viewed using Adobe Acrobat Reader. SVG files are smaller than the format currently used; therefore, they won't take as long to display.

c. MDL recompiles: Instep has been recompiling MDLs to run with MicroStation V8 for several districts.

d. Inroads: Working on updating INI files to 2.0 of the CADD Standard (just about finalized).

e. File Manager: Netspex was recently sold to CADD Center (Enterprise version-100 licenses). Details as to how the licenses will be shared out have yet to be worked out. Instep is integrating/streamlining the File Manager into Netspex. Netspex requires either Sequel Server or Oracle to be installed on the mirror server. St. Paul purchased 20 licenses of Netspex and will deploy with MicroStation V8.

f. CADD/GIS Integration: A tool to be used for CADD/GIS integration has been submitted for approval.

4. Explanation of Various Corps CADD Groups: The SAC/FAC groups were established by Headquarters in 1995 when the Corps' CADD Center became the TriService CADD Center (now known as the CADD/GIS Technology Center). The groups were formed to represent the Corps because other agencies were brought into the mix that had different needs. The working groups, which provided input to the Center, were no longer discipline-specific. The CADD/GIS Technology Center now has working groups for Design/Construction, Systems, Civil Works, Cultural Resources, etc. The Corps does have representatives on these working groups; however, the majority of participants are from different agencies.

     a. The Senior Advisory CADD (SAC) group is made up of Engineering Division Chiefs from various districts. They provide guidance and managerial support to the Field Action CADD (FAC) groups.

     b. FAC groups are comprised of discipline-specific representatives from across the Corps who are tasked with gathering input from various disciplines to make sure our interests are represented and projects considered. The current FAC chairs are:

Architectural FAC	Stan Shirk (Omaha)
Civil FAC	Ed Murphy (Ft. Worth)
Cost Engineering FAC	Garreth Clausen (Walla Walla)
Geotechnical FAC	Glenn Kato (Transatlantic Center)
Mechanical/Electrical FAC	Kendall Waldie (Ft. Worth)
Structural FAC	Lori Taylor (St. Paul)
Systems FAC	John Kincaid (Rock Island)

Since these groups work directly with the CADD/GIS Technology Center, comments regarding the A/E/C CADD Standard should be forwarded to one of these individuals.

     c. Corporate Staff: The Corporate Staff is comprised of CADD and GIS proponents from various agencies. The Corps CADD proponents are Jean McGinn and Larry Rogers (SAC Chair). Project approval is basically a negotiation process between the agencies. The Corporate Staff is scheduled to meet on July 15th to vote on FY04 projects proposals which were submitted to the CADD/GIS Technology Center Will meet to vote before July 15th. The Corporate Staff then submits their recommendation to the Board of Directors.

     d. The Board of Directors is comprised of SES members. They make the final project approval.

5. MDLs: Many of the frequently used MDLs have been recompiled to work with MicroStation V8. These can be downloaded from the CKB web page at http://ckb.wes.army.mil/index_sfac.htm?http://ckb.wes.army.mil/sfac/mdl.htm. If

there are still others needing recompiling, let Systems FAC know (John Kincaid, Roger Porzig or Ed Mathison). The CVTPTC mdl needs work regarding levels. It works with level numbers, but not level names. May be a better idea to rewrite in VBA so that it is more portable.

6. MicroStation V8 Implementation: In general, it was felt that the longer we wait to go to V8 the harder it will be. When converting existing files to V8, it is a good idea to run it through a file fixer first. Corrupted elements won't translate, so if there is a line string corruption, that line will not appear in the translated version of the file.

a.   Huntington will look at V8 at the end of FY, and plan to implement at the end of FY04.

b. Charleston has been using V8 on all their projects for the last year.

c. Walla Walla is using V8 in isolated production.

d. Omaha is going to V8 in 4 to 6 weeks and will be standards compliant at that time.

7. A/E/C CADD Standard:

a. Level Tables: Additional level tables are still needed for disciplines with regard to civil works type projects. The Civil FAC is working on level tables for navigation and flood control. The Structural FAC is also looking at adding additional levels. Now that an unlimited number of levels are possible with MicroStation V8, the CADD Center is looking at the consolidation of level tables.

b. There was discussion regarding the development a common pen table for the Corps for web publishing using Digital Interplot. Screening could be an issue. The Systems FAC group will work this out.

c. The need to add pen line widths to the A/E/C CADD Standard was expressed.

8. Moving Toward 3D Design: Jean McGinn has been tasked to develop a road map of how the Corps is going to go from 2D to 3D design. ***Email Jean with ideas on how we should go about doing this.*** The following related items were discussed:

a. Vertical Construction Models: 3D modeling can be done with Triforma, however, it doesn't have "…smart objects, they are just well informed elements." Omaha has been using ArchiCAD for 3D modeling. It uses more true object technology (objects that know what they are). Reserve centers want to go to Triforma. Ft. Worth can extract 3d model (SWF calls them buildings) to a

standards compliant model. However, a standard for 3D elements has not been established.

      b. Civil Models: In most districts, civil modeling is already being done in 3D. Most districts are using Iroads. Inroads is 3D, but it is not object based.

      c. 3D Projects: Ft. Worth and Sacramento districts have done projects entirely in 3D. Little Rock has done 3D models on two projects, but the entire project was not done in 3D.

      d. Recent software improvements have made 3D modeling more feasible. However, 3D modeling still takes more time, and is, therefore, more expensive. Far East District is working on a prototype project. It is believed that there may be more upfront costs in design, but the costs related to specs and estimating could be greatly reduced.

      e. 3D is useful in construction planning. Seattle District used 3D modeling as a tool to show a military base how it would look when they wanted to place a new building between two existing buildings. Without the visual provided by the 3D model, the base would have insisted on placing the building in a location where it would have looked really bad.

      f. We need to look at what our end product will be in the future. Are we moving toward a 3D construction package?

9. CADD/GIS Integration: Roger Porzig and Jim Vasser will work with Jean McGinn to develop a road map on how to integrate CADD and GIS: